REMARKS/ARGUMENTS

Reconsideration of the above-identified application respectfully requested.

In the Advisory Action of April 9, 2007, the Examiner states that Applicants do "not address examiner issue with 'substantial'; applicant has not quantified the acceptable level of solvents, or pointed to where any support lies for one in the art to know just how much solvent may be present in step (c), claim 1."

To the contrary, Applicants went into great detail on this issue in their Rule 116 amendment. Applicants did not feel it necessary to repeat this information in it first supplemental response. In view of the Examiner's recent comments, however, such information again is given.

The application as filed reads, *inter alia*,"

> The products of this invention have time horizons measured in years or decades. Therefore, solid products, not viscous liquids or gels, are needed. The solid preferably contains a mixture of pesticide species. Some of the pesticide is dissolved in the solid medium, some may be tiny pesticide crystals or droplets, some is trapped between layers of the clay (*i.e.*, intercalated), and some is bound to tactoid species, and some to single platelets (exfoliated). This product is a dynamic system that evolves over the years. The evolving system is what generates the sustained release rates over decades of interaction with its environment. (application at page 9, ll. 25-32).
>
> These procedures do not use water or organic solvents, as is customary in intercalating and exfoliating clays. (application at p. 15, ll. 6-7 in the examples).
>
> Thus, the above-tabulated results indicate that the nanoclays have the capacity to sorb more active agent than conventional clays without use of water or organic solvents. Conventional sorption theory would predict that an increase in sorption capacity would be associated with higher release rates. That is, the additional active ingredient molecules would occupy clay surface sites that offer less firm binding. When the release rate data below are reviewed, the superiority of nanoclays to standard clays will be complete because the release rates are quite unexpectedly decreased! (application at p. 17, ll. 13-15).

These excerpts teach that the active control agents are "solids", that the loaded nanoclays are processed in the absence of "added" liquid solvents, and that unexpected, superior results were recorded for such a product. Further, processing of intercalating and exfoliating clays is an art known process that avoids the use of solvents. The skilled artisan would know "how to make and use" the claimed subject matter based on the disclosure in the above-identified application.

Nevertheless, in order to provide further support and clarification, attached is a declaration of Dominic A. Cataldo, Ph.D., an inventor. Dr. Cataldo reviews the state of the art with respect to solid support sorbing and the affect that solvents (organic and water) have on the sorbing process. He then applies such knowledge to the nanoclays disclosed in the above-identified application. It is believed that such declaration and the original disclosure in the above-identified application answer the "substantial" question raised by the Examiner.,

In view of the amendments submitted herewith, allowance of the claims and passage to issue of this application respectfully requested.

Respectfully submitted,

Date: 24 April 2007

Jerry K. Mueller, Jr.
Reg. No. 27,576
MUELLER SMITH & MATTO
Mueller-Smith Building
7700 Rivers Edge Drive
Columbus, Ohio 43235-1355
Tel.: 614-436-0600
Fax: 614-436-0057
email: *smueller@muellersmith.com*

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited on April 24, 2007, with the United States Postal Service as first class mail in an envelope addressed to:

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Jane Keeney